



SEQUENCE LISTING

<110> Summar, Marshall
Christman, Brian
<120> THERAPEUTIC METHODS RELATING TO CARBAMYL PHOSPHATE SYNTHETASE I
POLYMORPHISM
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<141> 2000-06-01
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Gly	Thr	Met	Leu	Gly	Lys	Ile	Glu	Phe	Glu	Gly	Gln	Pro	Val	Asp	Phe	180	185	190
Val	Asp	Pro	Asn	Lys	Gln	Asn	Leu	Ile	Ala	Glu	Val	Ser	Thr	Lys	Asp	195	200	205
Val	Lys	Val	Tyr	Gly	Lys	Gly	Asn	Pro	Thr	Lys	Val	Val	Ala	Val	Asp	210	215	220
Cys	Gly	Ile	Lys	Asn	Asn	Val	Ile	Arg	Leu	Leu	Val	Lys	Arg	Gly	Ala	225	230	235
Glu	Val	His	Leu	Val	Pro	Trp	Asn	His	Asp	Phe	Thr	Lys	Met	Glu	Tyr	245	250	255
Asp	Gly	Ile	Leu	Ile	Ala	Gly	Gly	Pro	Gly	Asn	Pro	Ala	Leu	Ala	Glu	260	265	270
Pro	Leu	Ile	Gln	Asn	Val	Arg	Lys	Ile	Leu	Glu	Ser	Asp	Arg	Lys	Glu	275	280	285
Pro	Leu	Phe	Gly	Ile	Ser	Thr	Gly	Asn	Leu	Ile	Thr	Gly	Leu	Ala	Ala	290	295	300
Gly	Ala	Lys	Thr	Tyr	Lys	Met	Ser	Met	Ala	Asn	Arg	Gly	Gln	Asn	Gln	305	310	315
Pro	Val	Leu	Asn	Ile	Thr	Asn	Lys	Gln	Ala	Phe	Ile	Thr	Ala	Gln	Asn	325	330	335
His	Gly	Tyr	Ala	Leu	Asp	Asn	Thr	Leu	Pro	Ala	Gly	Trp	Lys	Pro	Leu	340	345	350
Phe	Val	Asn	Val	Asn	Asp	Gln	Thr	Asn	Glu	Gly	Ile	Met	His	Glu	Ser	355	360	365
Lys	Pro	Phe	Phe	Ala	Val	Gln	Phe	His	Pro	Glu	Val	Thr	Pro	Gly	Pro	370	375	380
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Gly	Lys	Ala	Thr	Thr	Ile	Thr	Ser	Val	Leu	Pro	Lys	Pro	Ala	Leu	Val	405	410	415
Ala	Ser	Arg	Val	Glu	Val	Ser	Lys	Val	Leu	Ile	Leu	Gly	Ser	Gly	Gly	420	425	430
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Val	Lys	Ala	Met	Lys	Glu	Glu	Asn	Val	Lys	Thr	Val	Leu	Met	Asn	Pro	450	455	460
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Gly Ala Ile	Glu Lys Val Lys Asp	Ala Thr Arg Lys Ile	Ala Lys	
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Val Ala Thr	Lys Val Met Ile Gly	Glu Asn Val Asp Glu	Lys His	
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Phe Gly Glu	Gly Ile His Thr	Ala Phe	Leu Lys Ala	Met Leu Ser		
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gct ggt gcc aaa acc tac aag atg tcc atg gcc aac aga ggg cag aat Ala Gly Ala Lys Thr Tyr Lys Met Ser Met Ala Asn Arg Gly Gln Asn 305 310 315	1080
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agc aaa ccc ttc ttc gct gtg cag ttc cac cca gag gtc acc ccg ggg Ser Lys Pro Phe Phe Ala Val Gln Phe His Pro Glu Val Thr Pro Gly 370 375 380	1272
cca ata gac act gag tac ctg ttt gat tcc ttt ttc tca ctg ata aag Pro Ile Asp Thr Glu Tyr Leu Phe Asp Ser Phe Phe Ser Leu Ile Lys 385 390 395	1320
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Ile Ile Ser	Val Gly Gly	Gln Ile	Pro Asn Asn	Leu Ala	Val Pro	
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Phe Ser Glu	Asp Glu Met	Lys Lys	Phe Leu Glu	Glu Ala	Thr Arg	
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Val Ser Gln	Glu His Pro	Val Val	Leu Thr Lys	Phe Val	Glu Gly	
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Ser Gly Asp	Ala Thr Leu	Met Leu	Pro Thr Gln	Thr Ile	Ser Gln	
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Leu Phe His Tyr Arg Gln Tyr Ser Ala Gly Lys Ala Ala	
1490 1495 1500	
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Arg Pro Gly Ile Arg Leu Leu Ser Val Lys Ala Gln Thr Ala His Ile	
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Pro	Glu	Ala	Ile	Thr 85	Asp	Pro	Ala	Tyr	Lys 90	Gly	Gln	Ile	Leu	Thr 95	Met
Ala	Asn	Pro	Ile 100	Ile	Gly	Asn	Gly	Gly 105	Ala	Pro	Asp	Thr	Thr 110	Ala	Leu
Asp	Glu	Leu 115	Gly	Leu	Ser	Lys	Tyr 120	Leu	Glu	Ser	Asn	Gly 125	Ile	Lys	Val
Ser	Gly 130	Leu	Leu	Val	Leu	Asp 135	Tyr	Ser	Lys	Asp	Tyr 140	Asn	His	Trp	Leu
Ala 145	Thr	Lys	Ser	Leu	Gly 150	Gln	Trp	Leu	Gln	Glu 155	Glu	Lys	Val	Pro	Ala 160
Ile	Tyr	Gly	Val	Asp 165	Thr	Arg	Met	Leu	Thr 170	Lys	Ile	Ile	Arg	Asp 175	Lys
Gly	Thr	Met	Leu 180	Gly	Lys	Ile	Glu	Phe 185	Glu	Gly	Gln	Pro	Val 190	Asp	Phe
Val	Asp 195	Pro	Asn	Lys	Gln	Asn	Leu 200	Ile	Ala	Glu	Val	Ser 205	Thr	Lys	Asp
Val 210	Lys	Val	Tyr	Gly	Lys	Gly 215	Asn	Pro	Thr	Lys	Val 220	Val	Ala	Val	Asp
Cys 225	Gly	Ile	Lys	Asn	Asn 230	Val	Ile	Arg	Leu	Leu 235	Val	Lys	Arg	Gly	Ala 240
Glu	Val	His	Leu	Val 245	Pro	Trp	Asn	His	Asp 250	Phe	Thr	Lys	Met	Glu 255	Tyr
Asp	Gly	Ile	Leu 260	Ile	Ala	Gly	Gly	Pro 265	Gly	Asn	Pro	Ala	Leu 270	Ala	Glu
Pro	Leu 275	Ile	Gln	Asn	Val	Arg	Lys 280	Ile	Leu	Glu	Ser	Asp 285	Arg	Lys	Glu
Pro 290	Leu	Phe	Gly	Ile	Ser	Thr 295	Gly	Asn	Leu	Ile	Thr 300	Gly	Leu	Ala	Ala
Gly 305	Ala	Lys	Thr	Tyr	Lys 310	Met	Ser	Met	Ala	Asn 315	Arg	Gly	Gln	Asn	Gln 320
Pro	Val	Leu	Asn	Ile 325	Thr	Asn	Lys	Gln	Ala 330	Phe	Ile	Thr	Ala	Gln 335	Asn
His	Gly	Tyr	Ala 340	Leu	Asp	Asn	Thr	Leu 345	Pro	Ala	Gly	Trp	Lys 350	Pro	Leu
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Lys	Pro 370	Phe	Phe	Ala	Val	Gln 375	Phe	His	Pro	Glu	Val 380	Thr	Pro	Gly	Pro

Ile	Asp	Thr	Glu	Tyr	Leu	Phe	Asp	Ser	Phe	Phe	Ser	Leu	Ile	Lys	Lys	385	390	395	400
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Ala	Ser	Arg	Val	Glu	Val	Ser	Lys	Val	Leu	Ile	Leu	Gly	Ser	Gly	Gly	420	425	430	
Leu	Ser	Ile	Gly	Gln	Ala	Gly	Glu	Phe	Asp	Tyr	Ser	Gly	Ser	Gln	Ala	435	440	445	
Val	Lys	Ala	Met	Lys	Glu	Glu	Asn	Val	Lys	Thr	Val	Leu	Met	Asn	Pro	450	455	460	
Asn	Ile	Ala	Ser	Val	Gln	Thr	Asn	Glu	Val	Gly	Leu	Lys	Gln	Ala	Asp	465	470	475	480
Thr	Val	Tyr	Phe	Leu	Pro	Ile	Thr	Pro	Gln	Phe	Val	Thr	Glu	Val	Ile	485	490	495	
Lys	Ala	Glu	Gln	Pro	Asp	Gly	Leu	Ile	Leu	Gly	Met	Gly	Gly	Gln	Thr	500	505	510	
Ala	Leu	Asn	Cys	Gly	Val	Glu	Leu	Phe	Lys	Arg	Gly	Val	Leu	Lys	Glu	515	520	525	
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Ile	Ala	Pro	Ser	Phe	Ala	Val	Glu	Ser	Ile	Glu	Asp	Ala	Leu	Lys	Ala	565	570	575	
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Ser	Val	Thr	Gly	Trp	Lys	Glu	Ile	Glu	Tyr	Glu	Val	Val	Arg	Asp	Ala	625	630	635	640
Asp	Asp	Asn	Cys	Val	Thr	Val	Cys	Asn	Met	Glu	Asn	Val	Asp	Ala	Met	645	650	655	
Gly	Val	His	Thr	Gly	Asp	Ser	Val	Val	Val	Ala	Pro	Ala	Gln	Thr	Leu	660	665	670	
Ser	Asn	Ala	Glu	Phe	Gln	Met	Leu	Arg	Arg	Thr	Ser	Ile	Asn	Val	Val	675	680	685	
Arg	His	Leu	Gly	Ile	Val	Gly	Glu	Cys	Asn	Ile	Gln	Phe	Ala	Leu	His	690	695	700	

Pro Thr Ser Met Glu Tyr Cys Ile Ile Glu Val Asn Ala Arg Leu Ser
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 Arg Ser Ser Ala Leu Ala Ser Lys Ala Thr Gly Tyr Pro Leu Ala Phe
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 Ile Ala Ala Lys Ile Ala Leu Gly Ile Pro Leu Pro Glu Ile Lys Asn
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 Thr Tyr Asn Gly Gln Glu His Asp Val Asn Phe Asp Asp His Gly Met
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Arg	Pro	Gly	Ile	Arg	Leu	Leu	Ser	Val	Lys	Ala	Gln	Thr	Ala	His	Ile			
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Pro	Glu	Ala	Ile	Thr	Asp	Pro	Ala	Tyr	Lys	Gly	Gln	Ile	Leu	Thr	Met			
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Cys	Gly	Ile	Lys	Asn	Asn	Val	Ile	Arg	Leu	Leu	Val	Lys	Arg	Gly	Ala			
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Pro	Leu	Ile	Gln	Asn	Val	Arg	Lys	Ile	Leu	Glu	Ser	Asp	Arg	Lys	Glu			
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His	Gly	Tyr	Ala	Leu	Asp	Asn	Thr	Leu	Pro	Ala	Gly	Trp	Lys	Pro	Leu			
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Phe	Val	Asn	Val	Asn	Asp	Gln	Thr	Asn	Glu	Gly	Ile	Met	His	Glu	Ser	355	360	365
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Ala	Ser	Arg	Val	Glu	Val	Ser	Lys	Val	Leu	Ile	Leu	Gly	Ser	Gly	Gly	420	425	430
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Val	Lys	Ala	Met	Lys	Glu	Glu	Asn	Val	Lys	Thr	Val	Leu	Met	Asn	Pro	450	455	460
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Thr	Val	Tyr	Phe	Leu	Pro	Ile	Thr	Pro	Gln	Phe	Val	Thr	Glu	Val	Ile	485	490	495
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Ala	Leu	Asn	Cys	Gly	Val	Glu	Leu	Phe	Lys	Arg	Gly	Val	Leu	Lys	Glu	515	520	525
Tyr	Gly	Val	Lys	Val	Leu	Gly	Thr	Ser	Val	Glu	Ser	Ile	Met	Ala	Thr	530	535	540
Glu	Asp	Arg	Gln	Leu	Phe	Ser	Asp	Lys	Leu	Asn	Glu	Ile	Asn	Glu	Lys	545	550	555
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His	Pro	Ser	Ile	Glu	Gly	Phe	Thr	Pro	Arg	Leu	Pro	Met	Asn	Lys	Glu	820	825	830
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Met	Val	Leu	Gly	Cys	Gly	Pro	Tyr	His	Ile	Gly	Ser	Ser	Val	Glu	Phe	980	985	990

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Tyr Lys Asn Gly Val Lys Ile Met Gly Thr Ser Pro Leu Gln Ile
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Leu Lys Val Ala Gln Ala Pro Trp Lys Ala Val Asn Thr Leu Asn
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Glu Ala Leu Glu Phe Ala Lys Ser Val Asp Tyr Pro Cys Leu Leu
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Arg Pro Ser Tyr Val Leu Ser Gly Ser Ala Met Asn Val Val Phe
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Ser Gln Glu His Pro Val Val Leu Thr Lys Phe Val Glu Gly Ala
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Arg Glu Val Glu Met Asp Ala Val Gly Lys Asp Gly Arg Val Ile
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Ser His Ala Ile Ser Glu His Val Glu Asp Ala Gly Val His Ser
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